SHRI VISHWA BANDHU GUPTA : Sir, I would like to know from the Minister whether the computer which has been developed would be compatible with other systems like I.B.M. and so on ? There are softwares which could be used on this computer and a specific printer, the kind of printer that they have, the Minister has said that it is Dot Matrix, but what kind of a Matrix they are using ?

SHRI SHIVRAJ PATIL : The system which we are using is Dote Matrix and this system is not compatible or as good as the systems which are available commercially in the market today. As far as software is concerned, it has to be developed in the country because nobody is going to develop software for the Indian Languages or the Scheduled Languages.

*345. (*The questioner (Shri Shanti Tyagi) was absent for answer vide cols.* 41—43 *infra.*)

*346. (*The questioners (Shrimati Usha Malhotra and Shri Nand Kishore Bhatt) were absent. For answer, vide Cols.* 43—45 *infra.*)

Technically qualified manpower in computers and electronics

*347. SHRI T. CHANDRASEKHAR REDDY : Will the PRIME MINISTER be pleased to state :

(a) whether the Central Government have called upon the State Governments and the Union Territory administrations for crash programme for making available technically qualified man-power in the fields of computers and electronics;

(b) if so, what are the details in this regard;

(c) what is the amount earmarked in the Seventh Five Year Plan for the electronics industry;

(d) what is the technically qualified man-power in the fields of computerised electronics which is available at present and will be needed by the end of the Seventh Five Year Plan; and

(e) what steps Government are taking to give technical training to the personnel in this field ?

THE MINISTER OF STATE IN MINISTRY OF SCIENCE AND TECHNOLOGY AND IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI SHIVRAJ PATIL) : (a) to (e) A Statement is laid on the Table of Rajya Sabha.

Statement

(a) Yes, Sir.

(b) Keeping in view the targetted production of about Rs. 10,000 crores during the terminal year of the Seventh Five Year Plan and recognising the fact that investment on technology etc. inducted for electronics can bring about the desired results only if adequate trained manpower is available, Department of Electronics had identified various programmes for development of manpower. These include : (i) Manpower Development programme : (ii) programmes relating to application of electronics in education: and (iii) those relating to manpower development specifically in computer and related area. Education in general, and technical education in particular, being mostly the responsibility of State Governments and to some extent that of the Union Ministries of Human Resources Development and Labour, the responsibility for implementation or the various programmes rests with these agencies. In order that these programmes, as worked out by Department of Electronics, for the Seventh Five Year Plan, are discussed among these agencies and an implementation plan

worked out, the Department of Electronics had called a meeting with the States and the Union Territory administrations on November 14, 1985. At this meeting, the State Governments and Union Territories were requested to draw up crash programmes for meeting the gaps in manpower requirement. While the Centre could provide them expert advice and guidance for planning, implementation etc. the State Governments and Union Territories were requested to arrange their own financial resources except for some seed money from the Centre.

(c) Union Government has specifically earmarked Rs. 35 crores in the Seventh Plan for manpower development in Electronics to be utilised for programmes of a Pilot illustrative/demonstrative nature. The amount earmarked for generation of special manpower for computers is Rs. 10 crores during the Seventh Five Year Plan.

(d) The estimated availability of personnel with Diploma/Degree in computer discipline is 3000. In addition, there are about 2000 people who have learnt computers as part of their curriculum in other disciplines.

The requirement of qualified manpower for computers at the Diploma/Degree level needed by the end of the Seventh Plan is estimated to be about 50,000. In addition, about 30,000 personnel would be needed at lower level. (Data Entry Operators, Computer Operators, Programme Assistants, etc.).

(e) Government has initiated a number of computer courses at different levels. The existing academic base for computer education is being enlarged. In addition, a number of programmes on continuing education, in-service training, short-term courses, evening courses, teachers training programme and use of new techniques like computer aided instructions, audio-visual instructions as well as the use of television network are being undertaken/planned.

SHRI T. CHANDRASEKHAR REDDY : Mr. Chairman, Sir, in the statement, it is stated that at present, there are about 50,000 people who have learnt computers whereas at the end of the Seventh Plan, the requirement of personnel is about 80,000.

May I know from the Hon'ble Minister what concrete steps the Department of Electronics have undertaken to have the trained manpower to meet the requirement as to my mind, there is a big gap and unless the Department of Electronics themselves undertake time-bound programmes, the gap may not bemet if it is left to the States and other Central Ministries ?

SHRI SHIVRAJ PATIL : Sir, now the Seventh Plan is endorsed and the Department of Electronics is going to spend about Rs. 45 crores, (Rs. 35 crores + 10 crores) on the man-power development for electronics and computers but the efforts of the Department of Electronics are not going to solve the total problem as such because the Department of Electronics is not in the field of importing education to the people. The education is the responsibility of the State Governments and the responsibility of the Human Resources Development Ministry in the country. In consultation with the Human Resources Development Ministry a in consultation with the Education Ministries in the States, we are trying to see that the courses are introduced which will educate our youngsters to understand electronics and the new methods. Now they are spending money from their portion of the allocations and we are spending money from our portion of the allocations. We have started courses which train people after Ph. D., after post-graduation, after diploma courses for one year, for one and a half year and six months and like that but these things by themselves are not going to solve the problem. So, we are relying upon the assistance, the help and the

cooperation coming from the State Governments as well as the other Departments in the country.

MR. CHAIRMAN : Second supplementary please.

SHRI T. CHANDRASEKHAR REDDY : Sir, the Government have initiated a number of programmes at different levels. May I know from the Hon'ble Minister what media is adopted by the Department of Electronics to popularise those programmes and whether there is any proposal to set up independent poly-technics to train personnel or to introduce the subject of computer in a big way in the Indian Institutes of Technology and Universities because we are entering the computer field and people have to be educated to take the maximum benefit out of it ?

SHRI SHIVRAJ PATIL : Sir, establishing polytechnics or institutes for this purpose will be very difficult. We would like to use the existing institutions for this purpose. But if a stage is reached when it becomes necessary, then at that stage it can be undertaken. But at this point of time, we are using existing institutions, existing mechanism, existing universities and facilities.

SHRI SURESH KALMADI : Sir, a Rs. 10,000 crores production is expected in the Seventh Plan in the field of electronics and computers. I am quite surprised that the manpower element has been played down and only Rs. 35 crores have been allotted for manpower development in the Seventh Five Year Plan as against an expected production of Rs. 10,000 crores. Also I am surprised that the Minister has stated that all the training aspects are going to be only with the State Governments and the Central Government is not going to encourage it. My submission to the Minister is that they must fund the State Governments in a big way. My question to you relates to the total number of jobs that are going to come out of it. It is only 80,000 jobs, trained and untrained, in the computer field. I want to know whether you are going to issue any directives to the Government offices and the public sector undertakings against the use of computers for office application, for making pay-rolls, etc. If it is defence or science and technology or to keep abreast with the latest technology, yes, definitely. But create more jobs in the Seventh Five Year Plan, I would like to know whether you would issue a directive that the computer would not be used in the field of office application in the public sector and in Government offices.

SHRI SHIVRAJ PATIL: Sir, this question is rather confusing. I have said that 80,000 persons would be required for using the computers, and not all the electronic instruments in the Seventh Five year Plan. Sir, the requirement of manpower for the electronic instruments, education, application, in all the electronic field is going to be different. It is not 80,000. Let us be clear on that point.

Secondly, an amount of Rs. 45 crores is being spent by the Department of Electronics for generating manpower for electronics. But that is not all. The State Governments are spending money on technical education. The Universities are spending money on technical education and other kinds of education. The Department of Human Resources Development is spending money for for that purpose. And there are other scientific departments also which are spending money for this purpose. Only if you take into account the account the sum total of all the amounts spent by the different departments, different State Governments and the Central Government, we will have an idea of the amount of money that is going to be spent. About the second part of the question, I do not know whether it arises out of it, but we would very much like to make it clear on the floor of this House and outside also that using the computers

in office, does not mean to employment potential in the office will be reduced. Now this is an instrument which helps us in increasing the efficiency, in reducing the delay and in helping those who are in the offices in getting their pay, pension and all other things in time. If you use computers in railway reservation, in the use of wagons on time, in the industry or in the power or energy ministry, it will help you. So the intention of the Government is not to issue—I am very clear on that point—instructions to the people not to use the computers because we have full faith in the modern instruments and we think that they generate and produce more employment. Now if any discussion is held on this subject here in this House or outside, we would have an opportunity of explaining that these new instruments do not reduce but increase the total employment opportunities.

SHRI RAJIV GANDHI : Sir, following from the suggestion of the hon. Member, we could also remove the typewriters from our offices and revert to calligraphy because that would employ even more people.

SHRI JAGESH DESAI : The Centre had called a meeting of the State Chief Ministers on 14th November 1985—on the birthday of our late Prime Minister, Pandit Jawaharlal Nehru—and at that meeting it was decided that the States should formulate a crash programme for bridging the gaps in manpower and equipment. I would like to know whether any time-limit was given and, if so whether any State Government has submitted a crash programme.

SHRI SHIVRAJ PATIL : Under the Constitution the Central Government is not expected to ask such kind of details from them. The meeting was organised to explain to them that there are certain new areas to develop and for the new areas a new kind of manpower has to be generated because they were on the verge of formulating the Five Year Plan and laying down policies for education in the Seventh Five Year Plan in the States. We wanted to explains to them, here is electronice which is expanding and there aro other areas also which are going t- come up on the horizon, so, man, power should be made ready. A the same time we wanted to explain to them as to how we would be able to help them in that ....(*Interruption*)

MR. CHAIRMAN : The Minister of Parliamentary Affairs is advised that he should not stand between the speaker and the Chair. That is not the etiquette in the House.

Now, Mr. Minister, have you finished? The question and the answer, both, are unintelligible.

SHRI SHIVRAJ PATIL : We have explained to them our programmes, the areas which are developing and we have asked them to take up this matter.

*348 [*The Questioners (Shri Kailash Pati Mishra and Shri Shanker Singh Vaghela)*] *were absent for answer*, vide *cols* 45 infra

*349. [*The questioner (Dr. Shyam Sundar Mohapatra) was absent. For answer*, vide *cols*.46 infra.)

*350. (*transferred to the 19th December*, 1985.)

Soviet assistance for different plan projects in India

*351. SHRI KALPNATH RAI : Will the PRIME MINISTER be pleased to state :

(a) whether the Indo-Soviet Planning Board held discussions recently regarding the Soviet assistance for different plan projects in India; and

(b) if so, what were the subjects discussed and whether any agreements have been reached?

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING (SHRI AJIT PANJA) : (a) and (b) No, Sir. However, the